SEQUENCE LISTING

<110> St. Jude Children's Research Hospital
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Keshvara, Lakhu

<120> Cyclin Dependent Kinase 5 Phosphorylation of Disabled 1 Protein

<130> SJ-01-0032

<140> 10/078,927
<141> 2002-02-19

<160> 4

<170> PatentIn version 3.2

<210> 1
<211> 6
<212> PRT
<213> Mus musculus

<220>
<221> DOMAIN
<222> (1)..(6)
<223> smallest carboxy terminal Dab1 tryptic fragment containing a Cdk5 phosphorylation site

<220>
<221> SITE
<222> (3)..(3)
<223> Serine at residue #3 equates to Serine491 in mouse Dab1 sequence

Cdk5 phosphorylation of Serine requires a Proline (P) in the +1 position and a Lysine (K) in the +3 position

<400> 1

Gln Ser Ser Pro Ser Lys
1 5

<210> 2
<211> 24
<212> PRT
<213> Mus musculus

<220>
<221> DOMAIN
<222> (1)..(24)
<223> Dab1 tryptic fragment containing a Cdk5 phosphorylation site

<220>
<221> SITE
<222> (21)..(21)
<223> Serine at Reisdue 21 equates to Serine515 in mouse Dab1 sequence

Cdk5 phosphorylation of Serine requires a Proline (P) in the +1 position and a Lysine (K) in the +3 position

<400> 2

Ser Ser Ala Ser His Val Ser Asp Pro Thr Ala Asp Asp Ile Phe Glu
1 5 10 15

Glu Gly Phe Glu Ser Pro Ser Lys
20

<210> 3
<211> 14
<212> PRT
<213> Mus musculus

<220>
<221> DOMAIN
<222> (1)..(14)
<223> Dab1 phosphopeptide domain used for antibody production

<220>
<221> MOD_RES
<222> (8)..(8)
<223> PHOSPHORYLATION, equates to Serine491 in mouse Dab1 sequence

Cdk5 phosphorylation of Serine requires a Proline (P) in the +1 position and a Lysine (K) in the +3 position

<400> 3

Thr Pro Ala Pro Arg Gln Ser Ser Pro Ser Lys Ser Ser Ala
1 5 10

<210> 4
<211> 555
<212> PRT
<213> Mus musculus

<400> 4

Met Ser Thr Glu Thr Glu Leu Gln Val Ala Val Lys Thr Ser Ala Lys
1 5 10 15

Lys Asp Ser Arg Lys Lys Gly Gln Asp Arg Ser Glu Ala Thr Leu Ile
20 25 30

Lys Arg Phe Lys Gly Glu Gly Val Arg Tyr Lys Ala Lys Leu Ile Gly
35 40 45

Ile Asp Glu Val Ser Ala Ala Arg Gly Asp Lys Leu Cys Gln Asp Ser
50 55 60

Met Met Lys Leu Lys Gly Val Val Ala Gly Ala Arg Ser Lys Gly Glu
65 70 75 80

His Lys Gln Lys Ile Phe Leu Thr Ile Ser Phe Gly Gly Ile Lys Ile

85 90 95

Phe Asp Glu Lys Thr Gly Ala Leu Gln His His His Ala Val His Glu
100 105 110

Ile Ser Tyr Ile Ala Lys Asp Ile Thr Asp His Arg Ala Phe Gly Tyr
115 120 125

Val Cys Gly Lys Glu Gly Asn His Arg Phe Val Ala Ile Lys Thr Ala
130 135 140

Gln Ala Ala Glu Pro Val Ile Leu Asp Leu Arg Asp Leu Phe Gln Leu
145 150 155 160

Ile Tyr Glu Leu Lys Gln Arg Glu Glu Leu Glu Lys Lys Ala Gln Lys
165 170 175

Asp Lys Gln Cys Glu Gln Ala Val Tyr Gln Thr Ile Leu Glu Glu Asp
180 185 190

Val Glu Asp Pro Val Tyr Gln Tyr Ile Val Phe Glu Ala Gly His Glu
195 200 205

Pro Ile Arg Asp Pro Glu Thr Glu Glu Asn Ile Tyr Gln Val Pro Thr
210 215 220

Ser Gln Lys Lys Glu Gly Val Tyr Asp Val Pro Lys Ser Gln Pro Val
225 230 235 240

Ser Ala Val Thr Gln Leu Glu Leu Phe Gly Asp Met Ser Thr Pro Pro
245 250 255

Asp Ile Thr Ser Pro Pro Thr Pro Ala Thr Pro Gly Asp Ala Phe Leu
260 265 270

Pro Ser Ser Ser Gln Thr Leu Pro Gly Ser Ala Asp Val Phe Gly Ser
275 280 285

Met Ser Phe Gly Thr Ala Ala Val Pro Ser Gly Tyr Val Ala Met Gly
290 295 300

Ala Val Leu Pro Ser Phe Trp Gly Gln Gln Pro Leu Val Gln Gln Gln
305 310 315 320

Ile Ala Met Gly Ala Gln Pro Pro Val Ala Gln Val Ile Pro Gly Ala
325 330 335

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Gln Pro Ile Ala Trp Gly Gln Pro Gly Leu Phe Pro Ala Thr Gln Gln
            340                 345                 350

Ala Trp Pro Thr Val Ala Gly Gln Phe Pro Pro Ala Ala Phe Met Pro
        355                 360                 365

Thr Gln Thr Val Met Pro Leu Ala Ala Ala Met Phe Gln Gly Pro Leu
    370                 375                 380

Thr Pro Leu Ala Thr Val Pro Gly Thr Asn Asp Ser Ala Arg Ser Ser
385                 390                 395                 400

Pro Gln Ser Asp Lys Pro Arg Gln Lys Met Gly Lys Glu Ser Phe Lys
                405                 410                 415

Asp Phe Gln Met Val Gln Pro Pro Pro Val Pro Ser Arg Lys Pro Asp
            420                 425                 430

Gln Pro Ser Leu Thr Cys Thr Ser Glu Ala Phe Ser Ser Tyr Phe Asn
        435                 440                 445

Lys Val Gly Val Ala Gln Asp Thr Asp Asp Cys Asp Asp Phe Asp Ile
    450                 455                 460

Ser Gln Leu Asn Leu Thr Pro Val Thr Ser Thr Thr Pro Ser Thr Asn
465                 470                 475                 480

Ser Pro Pro Thr Pro Ala Pro Arg Gln Ser Ser Pro Ser Lys Ser Ser
                485                 490                 495

Ala Ser His Val Ser Asp Pro Thr Ala Asp Asp Ile Phe Glu Glu Gly
            500                 505                 510

Phe Glu Ser Pro Ser Lys Ser Glu Glu Gln Glu Ala Pro Asp Gly Ser
        515                 520                 525

Gln Ala Ser Ser Thr Ser Asp Pro Phe Gly Glu Pro Ser Gly Glu Pro
    530                 535                 540

Ser Gly Asp Asn Ile Ser Pro Gln Asp Gly Ser
545                 550                 555
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